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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,501	11/06/2003	Sang Chul Yoon	P23893	7636
7055	7590	06/30/2004	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			RAPP, CHAD	
			ART UNIT	PAPER NUMBER
			2125	

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/701,501

Applicant(s)

YOON ET AL.

Examiner

Chad Rapp

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2125

1. Claims 1-10 are presented for examination.

***Information Disclosure Statement***

2. Missing PTO 1449. Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, lines 2-3 "the location" should be changed to "a location". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, Jr. et al. in view of Nonaka et al.

Brown, Jr. et al. teaches the claimed invention(claim 1) substantially as claimed including an air conditioner control system that uses a telephone network to control a plurality of air conditioners which are configured to transmit and receive signals over the telephone network comprising:

a. A remote electronic device having a control program configured to receive profile information for each of the plurality of air conditioners is taught as the central controller is programmed by the user to individually control each device(col.1 lines 8-16);

b. Transmit control commands to designated ones of the air conditioners over the telephone network on the basis of the registered profile information is taught as in response to messages received, controls at lest one device(col.1 lines 52-67).

Brown, Jr. et al. teaches the above listed details of the independent claim 1, however, Brown Jr. et al. does not teach: register the received profile information.

Nonaka et al. teaches :

a. Register the received profile information is taught as the remote controller of the air conditioners has an operation information of the air conditioners(abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Brown, Jr. et al. with the teachings of Nonaka et al. because it improves operability and protection from erroneous operations cased due to being connected to the network.

As to claim 2, Brown, Jr. et al. teach wherein the profile information includes a unique identifier for each of the air conditioners is taught as the fifth and sixth characters represent the device number being addressed(col. 17 lines 49-52).

As to claim 3, Brown Jr. et al. teaches:

a. Port setup module that sets up a port for connection to the telephone network to communicate with the air conditioners over the telephone network is taught as a telephone interface(col. 5 lines 9-33);

b. Registration module that registers the profile information for the air conditioners, whereby the profile information for each of the air conditioners includes a telephone number associated with the air conditioners and a unique ID assigned to the air conditioner is taught as a particular phone number goes to all and each has their own device code(col. 16 lines 59-65 and col. 17 lines 49-52).

As to claim 4, Brown Jr. et al. teaches wherein the profile information for each of the air conditioners further includes information regarding the location of the air conditioner and other information is taught as address code and the database holds various equipment and modes of operation(col. 27 lines 35-44).

As to claim 5, Brown Jr. et al. teaches wherein said control program further includes a data packet creator that generates a control command data packet based on a control command input by user is taught as customer command center causes a message to be sent(col. 16 lines 14-21).

As to claim 6, Brown Jr. et al. teaches wherein said remote electronic device includes a data packet transmitter that automatically transmits the control command data packet generated by said data packet creator over the telephone network to a telephone number associated with one of the air conditioners designed by the input control command is taught as customer

Art Unit: 2125

command center sends message to controller of air conditioner device over public telephone network(col. 16 lines 14-30 and col. 6 lines 15-18).

As to claim 7, Brown Jr. et al. teaches wherein said control program includes a data packet creator that generates a control command data packet based on a control input by a user is taught as user makes a simple phone call which goes to the command center which sends message onto the controller of the air conditioner.(col. 16 lines 14-30 and col. 6 lines 15-18).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, Jr. et al. in view of Nonaka et al.

Brown, Jr. et al. teaches the claimed invention(claim 1) substantially as claimed including a method of operating an air conditioner control system that uses a telephone network comprising:

a. Selecting one of the air conditioners to be controlled and inputting a control command for the selected air conditioner into the electronic device is taught as user makes a simple phone call which goes to the command center which sends message onto the controller of the air conditioner. (col. 16 lines 14-30 and col. 6 lines 15-18).

b. Generating a control command data packet based on the input control command and the registered profile information for the selected air conditioner and automatically transmitting the generated data packet over the telephone network to a telephone number associated with the selected air conditioner is taught as user makes a simple phone call which goes to the command center which sends message onto the controller of the air conditioner. (col. 16 lines 14-30 and col. 6 lines 15-18).

Brown, Jr. et al. teaches the above listed details of the independent claim 8, however, Brown Jr. et al. does not teach: running an air conditioner control program in a remote electronic device to register profile information for a plurality of air conditioners.

Nonaka et al. teaches :

a. Running an air conditioner control program in a remote electronic device to register profile information for a plurality of air conditioners is taught as the remote controller of the air conditioners has an operation information of the air conditioners (abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Brown, Jr. et al. with the teachings of Nonaka et al. because it improves operability and protection from erroneous operations caused due to being connected to the network.

As to claim 9, it would have been obvious to one of ordinary skill in the art at the time the invention was made or used to do registration request message is displayed by the control program if profile information for the selected air conditioner has not yet been registered because if the system does not register all components it will not be an optimum control so if a part is not registered it would alert the user such as on a screen.



As to claim 10, it would have been obvious to one of ordinary skill in the art at the time the invention was made or used to further comprising determining whether a port for transmission over the telephone network is in an open condition prior to transmitting the generated data packet if the line is busy a message will not be able to be sent so the process of sending messages needs to know if the line is clear.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Rapp whose telephone number is (703)306-4528. The examiner can normally be reached on Mon-Fri 11:00-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (703)308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chad Rapp  
Examiner  
Art Unit 2125

cjr

*Albert W. Paladini 6-28-04*  
**ALBERT W. PALADINI**  
**PRIMARY EXAMINER**